

Title (en)
COMPOSITE BIOMATERIALS

Title (de)
VERBUNDBIOMATERIALIEN

Title (fr)
BIOMATÉRIAUX COMPOSITES

Publication
EP 3969566 A4 20230920 (EN)

Application
EP 20805050 A 20200514

Priority
• US 201962847619 P 20190514
• CA 2020050655 W 20200514

Abstract (en)

[origin: WO2020227835A1] Provided herein are composite scaffold biomaterials including two or more scaffold biomaterial subunits, each including a decellularized plant or fungal tissue from which cellular materials and nucleic acids of the tissue are removed, the decellularized plant or fungal tissue having a 3-dimensional porous structure, the two or more scaffold biomaterial subunits being assembled into the composite scaffold biomaterial and held together via gel casting using a hydrogel glue; via complementary interlocking geometry of the two or more scaffold biomaterial subunits; via guided assembly based biolithography (GAB); via chemical cross-linking; or any combinations thereof. Methods for producing such scaffold biomaterials, as well as methods and uses thereof, are also provided.

IPC 8 full level

A61K 47/38 (2006.01); **A23L 13/00** (2016.01); **A23L 15/00** (2016.01); **A23L 17/00** (2016.01); **A23L 19/00** (2016.01); **A23L 31/00** (2016.01);
A61K 9/10 (2006.01); **A61K 47/46** (2006.01); **A61L 27/36** (2006.01); **A61L 27/38** (2006.01); **A61L 27/48** (2006.01); **A61L 27/54** (2006.01);
B01D 11/02 (2006.01); **B33Y 80/00** (2015.01); **C08J 3/075** (2006.01); **C08J 3/24** (2006.01); **C08J 5/12** (2006.01); **C08L 1/02** (2006.01);
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CPC (source: EP IL US)

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A61L 27/3683 (2013.01 - EP IL); **A61L 27/3826** (2013.01 - EP IL); **A61L 27/48** (2013.01 - EP IL); **A61L 27/52** (2013.01 - US);
A61L 27/54 (2013.01 - EP IL); **B01D 11/0257** (2013.01 - IL); **B01D 11/0288** (2013.01 - IL); **B33Y 10/00** (2014.12 - US);
B33Y 70/00 (2014.12 - US); **B33Y 80/00** (2014.12 - EP IL US); **C08J 3/075** (2013.01 - EP IL); **C08J 3/24** (2013.01 - EP IL);
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Citation (search report)

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- [A] US 2007010831 A1 20070111 - ROMERO-ORTEGA MARIO I [US], et al
- [A] CN 105637127 A 20160601 - BAST & FASER GMBH PRENZLAU
- [I] WO 2018200816 A1 20181101 - UNIV MICHIGAN REGENTS [US]
- [A] US 2009209982 A1 20090820 - HOERSTRUP SIMON P [CH], et al
- See references of WO 2020227835A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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CA 3136016 A1 20201119; CN 114222812 A 20220322; EP 3969566 A1 20220323; EP 3969566 A4 20230920; IL 287849 A 20220101;
JP 2022533973 A 20220727; MX 2021013857 A 20220322; US 2022296783 A1 20220922

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